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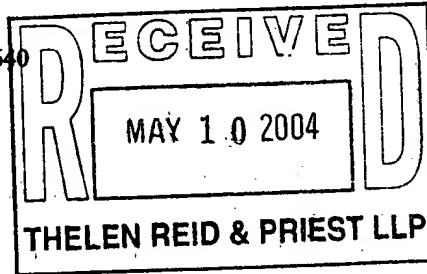
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,693	04/25/2000	Qingming Ma	CISCO-1119	9138

7590

05/05/2004

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EXAMINER

MEW, KEVIN D

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 05/05/2004

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LD 10-5-04

Please find below and/or attached an Office communication concerning this application or proceeding.

Mail log	Date
CPI	Date
Excel	Date

DOCKETED
MAY 11 2004

Office Action Summary

Application No.

09/558,693

Applicant(s)

MA, QINGMING

Examiner

Kevin Mew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/12/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-38 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Response to Amendment

1. Applicant's arguments filed on 2/12/2004 regarding claims 1-38 have been considered.
2. Acknowledgement is made of amended claims 1-32, 35-38 received, which has corrected the defective items in the 35 USC § 112 rejection of the previous office action.

Drawings

3. The drawings were received on 4/25/2000. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Reference numerals 516, 518, 520, 522, 523, 524, 526, 528 in Figure 5.

Reference numerals 632, 635 in Figure 6.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "606" has been used to designate both memory and inter-domain router (see Figure 6 and line 17, page 21). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In particular, the abstract of the applicant's disclosure exceeds 150 words in length. Appropriate correction is required.

6. The disclosure is objected to because of the following informalities:

Reference numeral 1110 is mistyped as 1100 in line 12, page 36 and reference numeral 1360 is mistyped as 1460 in line 15, page 38.

Appropriate correction is required.

Response to Arguments

7. Applicant's arguments, see lines 9-19, page 16, filed on 2/12/2004, with respect to claims 1, 2, 9, 13, 14, 21, 25, 26, 33, 37, 38 have been fully considered and are persuasive. The rejection of claims 1, 2, 9, 13, 14, 21, 25, 26, 33, 37, 38 has been withdrawn.

8. Applicant's arguments, see line 10, page 18, filed on 2/12/2004, with respect to claims 3, 4, 10, 15, 16, 22, 27, 28, 34, claims 5, 6, 11, 17, 18, 23, 29, 30, 35, and claims 7, 8, 12, 19, 20, 24, 31, 32, 36 have been fully considered and are persuasive. The rejection of claims 3, 4, 10, 15, 16, 22, 27, 28, 34, claims 5, 6, 11, 17, 18, 23, 29, 30, 35, and claims 7, 8, 12, 19, 20, 24, 31, 32, 36 has been withdrawn.

Allowable Subject Matter

9. Claims 1-38 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, a method for routing a data packet through an explicit path in a data communication network, the method comprising:

calculating an outgoing global identifier for said data packet as a function of (1) said incoming global path identifier and (2) an identifier of said network device receiving said data packet at said current hop.

Regarding claim 9, a method for routing a data packet through at least one explicit path in a data communication network, the method comprising:

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performing a look-up function into a forwarding table using an index based on said source/destination data pair to determine a forwarding table entry related to a next node along said route to which data packet should be forwarded.

Regarding claim 13, an apparatus for routing a data packet through an explicit path in a data communication network, the apparatus comprising:

means for calculating an outgoing global identifier for said data packet as a function of (1) said incoming global path identifier and (2) an identifier of said network device receiving said data packet at said current hop.

Regarding claim 21, an apparatus for routing a data packet through at least one explicit path in a data communication network, the apparatus comprising:

means for performing a look-up function into a forwarding table using an index based on said source/destination data pair to determine a forwarding table entry related to a next node along said route to which data packet should be forwarded.

Regarding claim 25, an apparatus for routing a data packet through an explicit path in a data communication network, the apparatus comprising:

path identifier assignment logic which calculates an outgoing global identifier for said data packet as a function of (1) said incoming global path identifier and (2) an identifier of said network device receiving said data packet at said current hop.

Regarding claim 33, an apparatus for routing a data packet through at least one explicit path in a data communication network, the apparatus comprising:

table search logic for performing a look-up function into a forwarding table using an index based on said source/destination data pair to determine a forwarding table entry related to a next node along said route to which data packet should be forwarded.

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Regarding claim 37, a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for routing a data packet through an explicit path in a data communication network, the method comprising:

calculating an outgoing global identifier for said data packet as a function of (1) said incoming global path identifier and (2) an identifier of said network device receiving said data packet at said current hop.

Regarding claim 38, a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for routing a data packet through an explicit path in a data communication network, the method comprising:

performing a look-up function into a forwarding table using an index based on said source/destination data pair to determine a forwarding table entry related to a next node along said route to which data packet should be forwarded.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to dynamic and scalable data packet routing through an explicit path in a data communication network.

US Patent 6,526,056 to Rekhter et al.

US Patent 6,522,630 to Ooms et al.

US Publication 2001/0021190 to Hummel

US Publication 2002/0091855 to Yemini et al.

US Publication 2002/0163889 to Yemini et al.

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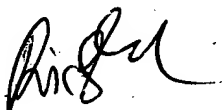
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300.

The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM
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RICKY NGO
PRIMARY EXAMINER